

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An ink jet printhead comprising:
a plurality of nozzles;
a plurality of bubble forming chambers each corresponding to a respective one of the nozzles; and

a heater element and a non-heater element disposed in each of the bubble forming chambers to overlay one another with a space therebetween, the heater and non-heater elements being formed of the same heater material and each heater element being connected to corresponding electrodes so as to be in thermal contact with a bubble forming liquid in the respective bubble forming chamber, such that:

heating each heater element with said corresponding electrodes to a temperature above the boiling point of the bubble forming liquid forms a gas bubble that causes the ejection of a drop of an ejectable liquid through the nozzle corresponding to that heater element; wherein,
each heater element has a bubble nucleation section, each bubble nucleation section having a smaller cross section than the remainder of that heater element, and
each bubble forming chamber has a circular cross section and each heater element has arcuate sections that are concentric with the circular cross section.

- 2-4. (Canceled)

5. (Original) The printhead of claim 1 wherein the bubble forming liquid and the ejectable liquid are of a common body of liquid.

6. (Original) The printhead of claim 1 being configured to print on a page and to be a page-width printhead.

7. (Canceled)

8. (Currently Amended) The printhead of claim 1 wherein each heater element is configured such that an actuation energy of less than 500 nanojoules (nJ) is required to be

applied to that heater element to heat that heater element sufficiently to form a ~~said~~said bubble in the bubble forming liquid thereby to cause the ejection of a ~~said~~said drop.

9. (Canceled)

10. (Original) The printhead of claim 1 comprising a substrate having a substrate surface, wherein the areal density of the nozzles relative to the substrate surface exceeds 10,000 nozzles per square cm of substrate surface.

11. (Original) The printhead of claim 1 wherein each heater element has two opposite sides and is configured such that a said gas bubble formed by that heater element is formed at both of said sides of that heater element.

12. (Previously Presented) The printhead of claim 1 wherein the bubble which each heater element is configured to form is collapsible and has a point of collapse, and wherein each heater element is configured such that the point of collapse of a bubble formed thereby is spaced from that heater element.

13. (Original) The printhead of claim 1 comprising a structure that is formed by chemical vapor deposition (CVD), the nozzles being incorporated on the structure.

14. (Original) The printhead of claim 1 comprising a structure which is less than 10 microns thick, the nozzles being incorporated on the structure.

15. (Canceled)

16. (Original) The printhead of claim 1 wherein each heater element is formed of solid material more than 90% of which, by atomic proportion, is constituted by at least one periodic element having an atomic number below 50.

17. (Currently Amended) The printhead of claim 1 wherein each heater element includes solid material and is configured for a mass of less than 10 nanograms of the solid material of that heater element to be heated to a temperature above said boiling point thereby to heat the

bubble forming liquid to a temperature above said boiling point to cause the ejection of a said drop.

18. (Previously Presented) The printhead of claim 1 wherein each heater element is covered by a conformal protective coating, the coating of each heater element having been applied substantially to all sides of the heater element simultaneously such that the coating is seamless.

19-54. (Canceled)